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| APPLICATION NO. | FILING DATE | FIRST NAMED II | NVENTOR | AT | TORNEY DOCKET NO. |
|--------------------------|-------------|----------------|----------|----------|-------------------|
| 09/096,51 | 5 06/12/9 | 8 INOUE | | Y | 35.G2190 |
| 005514 | PM82/0731 | | 乛 | EXAMINER | |
| | CK CELLA HA | | DORSEY_D | | |
| 30 ROCKEFE NEW YORK N | ELLER PLAZA | | | ART UNIT | PAPER NUMBER |
| NEW TORK I | 10112 | | | 3635 | 10 |

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

| | | L A Para di Na | Annibondo | | | | |
|---|---|-------------------------|--|--|--|--|--|
| Office Action Summary | | Application No. | Applicant(s) | | | | |
| | | 09/096,515 | INOUE ET AL. | | | | |
| | | Examiner | Art Unit | | | | |
| | | Dennis L Dorsey | 3635 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | | |
| 1)⊠ | Responsive to communication(s) filed on 18. | <u>lune 2001</u> . | | | | | |
| 2a)⊠ | This action is FINAL . 2b) ☐ Th | is action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposition of Claims | | | | | | | |
| 4)⊠ Claim(s) <u>1-13</u> is/are pending in the application. | | | | | | | |
| 4a) Of the above claim(s) <u>1-3,5 and 13</u> is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ Claim(s) <u>4 and 6-12</u> is/are rejected. | | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | | |
| Application Papers | | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | |
| 10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| 11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner. | | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | | |
| 12)☐ The oath or declaration is objected to by the Examiner. | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | |
| a)⊠ All b)☐ Some * c)☐ None of: | | | | | | | |
| | 1. ☐ Certified copies of the priority document | s have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | | |
| a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | | |
| Attachment(s) | | | | | | | |
| 1) | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) _ | 5) Notice of Info | nmary (PTO-413) Paper No(s) rmal Patent Application (PTO-152) | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 4 and 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoyama et al. in view of Hayami and Applicant's disclosure of the prior art.

Itoyama et al. teaches all the limitations of the above claims except the composition of the jacket of the connector and electrical lead, the electrical connector contacting the backing material, and the specific composition of the backing material. Itoyama teaches a solar cell (101), fixed to a metal substrate (107), fixed to a load bearing, water resistance and heat resistance backing material (104), electrically connected (113) between the backing material and building material, spacers (102), power converter (column 3, lines 12-15), and air flow apparatus (see figure 8). The Applicant's disclosure of the prior art teaches that it is well for one skill in the art to lengthen the electrical connector causing it to be in contact with the backing material to make connecting the panels easier (page 3, lines 18-25). Hayami teaches lead wires surrounded by a jacket composed of polyethylene resin. It would have been obvious for one skilled in the art at the time the invention was made to select such a material as a jacket cover, since it is held to be within the skill of a worker in the art to select a known material as a matter of design choice to provide superior protection of the electrical

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lead. It would have been obvious for one skilled in the art at the time the invention was made to pick and choose among the asphalt resins or any of the available materials readily available on the market to use as the backing material or roof board, since it is held to be within the general skill of a worker in the art to select a suitable material according to the given parameters, in this case a load bearing, water and heat resistant material for supporting the solar cell.

Response to Arguments

3. Applicant's arguments filed June 18, 2001 have been fully considered but they are not persuasive. The Examiner maintains that Itoyama teaches or suggest all the limitations as spelled out in the above rejection. The combination of the references and the disclosure of the prior art by the Applicant provides the teaching for one skilled in the art. The Examiner further maintains that the market place in the art is full of materials readily available to an artisan to pick and choose according to the design parameters. In the case of the backing material the parameters were load bearing, water resistant, and heat resistant.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis L Dorsey whose telephone number is 703-306-

9137. The examiner can normally be reached on Tuesday-Friday 7:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on 703-308-0839. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3597 for regular communications and 703-3053597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1020.

Carl D. Friedman Supervisory Patent Examiner Group 3600

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